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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/088,025	03/14/2002	Andreas Reindl	3557-12	4942
23416	7590	03/02/2006	EXAMINER	
CONNOLLY BOVE LODGE & HUTZ, LLP			KALLIS, RUSSELL	
P O BOX 2207			ART UNIT	PAPER NUMBER
WILMINGTON, DE 19899			1638	

DATE MAILED: 03/02/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/088,025	REINDL ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Russell Kallis	1638	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 16 December 2005.
- 2a) This action is **FINAL**.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 19-40 is/are pending in the application.
  - 4a) Of the above claim(s) 28-31 and 35-40 is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 19-27 and 32-34 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 13 September 2002 is/are: a) accepted or b) objected to by the Examiner.
 

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) All    b) Some \* c) None of:
    1. Certified copies of the priority documents have been received.
    2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)             | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____ .  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ .   | 6) <input type="checkbox"/> Other: _____ .                                  |

## **DETAILED ACTION**

Claims 1-18 are cancelled. Newly filed claims 19-40 are pending.

### ***Election/Restrictions***

Restriction is required under 35 U.S.C. 121 and 372.

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1.

In accordance with 37 CFR 1.499, applicant is required, in reply to this action, to elect a single invention to which the claims must be restricted.

Group I, claim(s) 19-27, 32-34 drawn to a first method of making, comprising transforming a plant with an ATP/ADP translocator gene of SEQ ID NO: 1.

Group II, claim(s) 28-31 drawn to a second method of making, comprising transforming a plant with an ATP/ADP translocator gene of SEQ ID NO: 2.

Group III, claim(s) 35 drawn to a third method of making, comprising transforming a plant with a gene structure comprising an ATP/ADP translocator gene and a regulatory sequence.

Group IV, claim(s) 36-39 drawn to a fourth method of making, comprising transforming a plant with a vector comprising an ATP/ADP translocator gene of SEQ ID NO: 1.

Group V, claim(s) 36-38, 40 drawn to a fifth method of making, comprising transforming a plant with a vector comprising an ATP/ADP translocator gene of SEQ ID NO: 2 in antisense orientation.

The inventions listed as Groups I-IV and V do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons: the special technical feature of a plant comprising an extra copy of an ATP/ADP translator gene was known in the art. Sijmons P. *et al.* WO 94/10320 published 11 May 1994 teaches a method of transforming potato with a construct comprising an adenine nucleotide translocator gene from Solanum tuberosum on page 22 in Example VII.

Applicant is advised that the reply to this requirement to be complete must include (i) an election of a species or invention to be examined even though the requirement be traversed (37 CFR 1.143) and (ii) identification of the claims encompassing the elected invention.

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

The election of an invention or species may be made with or without traverse. To reserve a right to petition, the election must be made with traverse. If the reply does not distinctly and specifically point out supposed errors in the restriction requirement, the election shall be treated as an election without traverse.

Should applicant traverse on the ground that the inventions or species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the inventions or species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

Newly submitted claims 28-40 are directed to an invention that is independent or distinct from the invention originally claimed for the following reasons: Claims 28-31 are drawn to non-elected SEQ ID NO: 2; and Claims 35-40 are drawn to third, fourth and fifth methods of making that are distinct in that they drawn to either a gene structure or vector comprising an ATP/ADP translocator gene that would require further searching, or they are drawn to an antisense of SEQ ID NO: 2 all of which were not within the originally elected group.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claims 28-31 and 35-40 are withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

Claims 19-27 and 32-34 are examined. Claims 28-31 and 35-40 are withdrawn.

This application contains claims 28-31 and 35-40 drawn to an invention nonelected with traverse in Paper No. 10/29/2004. A complete reply to the final rejection must include cancellation of nonelected claims or other appropriate action (37 CFR 1.144) See MPEP § 821.01.

Rejections and objections not set forth below are withdrawn.

#### ***Sequence Rules***

The amendment submitted September 13, 2002 has been entered and does show that the sequence identifiers have been added to the figures.

#### ***Double Patenting***

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 19-27 and 32-34 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 6-7, 10, 12-13 and 16-19 of U.S. Patent No. 6,891,088. Although the conflicting claims are not identical, they are not patentably distinct from each other because claims 6-7, 10, 12-13 and 16-19 of U.S. Patent No. 6,891,088 are methods comprising transforming a plant cell or plant by integrating a foreign nucleic acid molecule encoding a plastidial ATP/ADP translocator (e.g. the AATP1 gene from *Arabidopsis*, SEQ ID NO: 5 of the issued patent) and thus render obvious Claims 19-27 and 32-34 drawn to a method wherein the only active method step is transformation with an ATP/ADP translocator gene (e.g. the AATP1 gene from *Arabidopsis*, SEQ ID NO: 1 of the instant application).

Applicant asserts that the obvious type double patenting is not applicable because the issued patent and the instant application do not share the same assignee and the issued patent does not teach that the plants transformed with an ATP/ADP translocator would have modified amino acid content (response pages 8). Applicant's attention is directed to MPEP 804 where it is clearly stated that a Double Patenting rejection is applicable when there is either a common assignee or a common inventor (see Chart II-B). Further, the only active method step in either the issued patent or the claims of the instant application is transformation with an ATP/ADP translocator gene, and thus the method of the instant application would produce plants that are the same as those plants produced by the methods of the issued patent.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 19-27 and 32-34 are rejected under 35 U.S.C. 102(b) as being anticipated by Tjaden J. *et al.* The Plant Journal, 1998, Vol. 16, No. 5; pp. 531-540.

Tjaden teaches potato plants transformed with a construct comprising the 35S sequence, the heterologous AATP1 plastidic ATP/ADP translocator gene from *Arabidopsis* that comprises SEQ ID NO: 1 (Z49227) in sense and antisense orientation, wherein the AATP1 antisense construct downregulated ATP/ADP translocator activity thus decreasing ATP import in transformed potato and AATP1 sense transformed potato plants demonstrated an upregulated ATP/ADP translocator activity and increased ATP import (see page 531 column 2, lines 16-20; page 532 column 2 to page 533 column 2; and see also Table 2 page 533); and wherein modified amounts of one or more amino acids is an inherent feature of a plant transformed with an ATP/ADP translocator gene, and thus the reference teaches all the limitations of Claims 19-27 and 32-34.

Applicant asserts that the reference does not teach and thus does not anticipate the claimed invention because the reference does not teach that the plants transformed with an ATP/ADP translocator gene have modified amino acid content (pages 8-9). The modified amino acid content is an inherent feature of a plant made by the method of transformation with an ATP/ADP translocator gene, which is the same method as that claimed by Applicant.

***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

All claims are rejected.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Russell Kallis whose telephone number is (571) 272-0798. The examiner can normally be reached on M-F 8:30-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anne Marie Grunberg can be reached on (571) 272-0975. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Russell Kallis Ph.D.  
February 24, 2006

RUSSELL P. KALLIS, PH.D.  
PRIMARY EXAMINER

